CLAIMS:

- 1. A method for identifying a digitized X-ray film comprising at least one label the method comprising:
 - (i) obtaining a digital image of said label;
 - (ii) digitally associating said digitized image of the label with said digitized X-ray film;
 - (iii) displaying said digital image of said label thereby allowing a user to identify said digitized X-ray film.
- 2. The method as claimed in claim 1 further comprising the step of selecting said label to display said associated digitized X-ray film.
- 3. The method as claimed in claim 1 further comprising the step of digitally enhancing said image of the label prior to displaying said image of the label.
- 4. The method as claimed in claim 3 wherein said step of digitally enhancing comprises removing textured background and increasing contrast between background and alpha-numeric characters in said image of the label.
- 5. The method as claimed in claim 1 further comprising the step of digitally associating the label with a corresponding image analysis result of the digitized X-ray film.

- 6. The method as claimed in claim 5 wherein said image analysis is a Computer Aided Detection (CAD) analysis.
- 7. The method as claimed in claim 2 wherein said image of said label is displayed simultaneously with said digitized X-ray film.
- 8. The method as claimed in claim 5 wherein said image of said label is displayed simultaneously with said image analysis result.
- 9. The method as claimed in claim 5 wherein said image of said label is displayed simultaneously with said image analysis result and said digitized X-ray film.
- 10. The method as claimed in claim 1 wherein said step of obtaining a digital image of the label comprises
 - (i) determining position of said label on said film;
 - (ii) digitally extracting said image of said label.
- 11. The method as claimed in claim 10 wherein said step of determining is performed automatically
- 12. The method as claimed in claim 11 wherein said step of determining position is performed using a method selected from edge detection and texture segmentation.

- 13. The method as claimed in claim 10 wherein said step of determining is performed by a user.
- 14. A method for retrieving, from a plurality of digitized X-ray films, a digitized X-ray film said film comprising at least one label, the method comprising:
 - (i) obtaining a digital image of said label;
 - (ii) digitally associating said digitized image of the label with said digitized X-ray film;
 - (iii) displaying a plurality of labels each associated with a digitized X-ray film;
 - (iv) selecting a label from said plurality of labels to retrieve said digitized X-ray film.
- 15. The method as claimed in claim 14 further comprising the step of displaying said X-ray film.
- 16. The method as claimed in claim 14 further comprising the step of digitally enhancing said image of the label prior to displaying said image of the label.
- 17. The method as claimed in claim 16 wherein said step of digitally enhancing comprises removing textured background and increasing contrast between background and alpha-numeric characters in said image of the label.

- 18. The method as claimed in claim 14 wherein image analysis results are associated with said digitized image and wherein the method further comprises the step of displaying corresponding image analysis results of the digitized X-ray film.
- 19. The method as claimed in claim 18 wherein said image analysis is CAD analysis.
- 20. A method for automatically grouping digitized X-ray films comprising at least one label and belonging to a same case and/or patient the method comprising:
 - (i) obtaining a digital image of said label;
 - (ii) digitally associating said digitized image of the label with said digitized X-ray film;
 - (iii) analyzing images of a plurality of labels associated with respective digitized X-ray films;
 - (iv) identifying labels within said plurality of labels having a desired degree of correlation sufficient to indicate that said identified labels belong to said same case and/or patient;
 - (v) digitally grouping digitized X-ray films corresponding to said identified labels.
- 21. The method as claimed in claim 20 wherein said step of analyzing is performed using shift/rotation or intensity/contrast variations.

- 22. The method as claimed in claim 20 wherein each of said identified labels is associated with each film belonging to said same case and/or patient and wherein any one of said labels can be selected to effect display of all of said films.
- 23. A method for assigning a label detection application to a digital image the method comprising steps of:
 - (i) selecting a label acquisition model from a plurality of acquisition models based on at least one attribute of the digital label; and
 - (ii) selecting a label detection application from a plurality of label detection applications using the selected acquisition model.
- 24. The method as claimed in any one of claims 1-21 wherein said label is one or more sub-label.
- 25. The method as claimed in claim 24 wherein said one or more sub-label comprises information selected from name of said patient, exposure voltage and orientation.
- 26. The method as claimed in claim 1, 14, 20 or 22 wherein said digitized X-ray film is displayed simultaneously with said label and wherein said label and digitized X-ray film are visually associated.

- 27. A system for identifying and retrieving digitized X-ray films having a label applied to each film, the system comprising:
 - (i) an X-ray film digitizer for generating a digital image of each X-ray film;
 - (ii) means for determining a position of the label on the digital image of the X-ray film;
 - (iii) means for digitally extracting an image of the label from the digital image of the x-ray film;
 - (iv) means for digitally associating the image of the label with the digitized image of the X-ray film;
 - (v) means for displaying the label.
- 28. The system as claimed in claim 23 further comprising means for digitally associating the label with image analysis results of a corresponding digitized image of the X-ray film.
- 29. The system as claimed in claim 24 wherein said image analysis is CAD analysis.
- 30. The system as claimed in claim 24 further comprising means for analyzing the images of a plurality of labels.

31. The system as claimed in claim 24 further comprising means for displaying images of one or more labels, means for permitting a user to select one of the displayed labels, means for retrieving a digitized image of an X-ray film associated with the selected label and means for displaying the retrieved digitized images of the X-ray films for examination by the user.